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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,655	06/29/2001	Theary Chheang	56719US002	8517
32692	7590	11/24/2003	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			WYROZEBSKI LEE, KATARZYNA I	
			ART UNIT	PAPER NUMBER

1714

DATE MAILED: 11/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/896,655	CHHEANG ET AL.	
	Examiner	Art Unit	
	Katarzyna Wyrozebski Lee	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 and 25-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-14, 16-24 and 35 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) 1-35 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

In view of applicant's response mailed on 10/03/2003 following final office action is issued. Claims 1-35 are still pending, claims 1-11 and 25-34 are withdrawn from consideration. All rejections of record are not overcome.

In view of applicant's explanation of conductive additive that is scrim, objection to claim 15 is hereby overcome.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 12, 14, 16-19, 23, 24, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by CHRISTIAN (US 6,060,230).

The discussion of the disclosure of the prior art of CHRISTIAN from paragraph 4 of the office action mailed on 6/4/2003 is incorporated here by reference.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 13, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHRISTIAN (US 6,060,230) in view of HANSEN (US 5,672,400).

The discussion of the disclosure of the prior art of CHRISTIAN and HANSEN from paragraph 8 of the office action mailed on 6/4/2003 is incorporated here by reference.

5. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record as applied against present claim or in the updated search did not result in clay composition comprising scrim.

In the amendment filed on 10/3/2003 the applicant has argued that the clay of the prior art of CHRISTIAN is hydrophilic and not organophilic.

The definition of organo clay, is that it is pre-treated with an organic compound, which modifies the surface of the clay and renders it compatible with polymeric matrix. In view of the above definition the prior art of CHRISTIAN states the following:

electrically-conductive metal-containing colloidal particles; (2) swellable, smectite clay particles; (3) a polymer capable of sufficiently intercalating inside and/or exfoliating the smectite clay particles; and (4) a second film-forming polymeric binder. The conductive metal-containing particles and the polymer-intercalated smectite clay particles are co-dispersed in the second polymeric binder. The second

The prior art of CHRISTIAN teaches intercalation of the clay component with first polymer before it is incorporated into second polymer. The first polymer of CHRISTIAN contains functional groups that are capable of reacting with clay component. The clays of CHRISTIAN include those that have pendant -OH group (this will form an oxonium), sodium and potassium salts of PVP (will undergo cation exchange) or sulfonate group (col. 10, lines 23-47). These polymers are also referred to ionomers and are different from the second polymer component or binder listed in further paragraphs of the prior art of CHRISTIAN. Therefore, in fact, the clay component of CHRISTIAN is organophilic or organoclay and further rejections are warranted.

The applicants further argued that the prior art of HANSEN does not provide for the deficiencies of CHRISTIAN.

The prior art of HANSEN was utilized to supply presence of components of the independent claims and these include tackifiers as well as other polymers. The applicant has not argued successfully why it would not have been obvious to combine the prior art of record.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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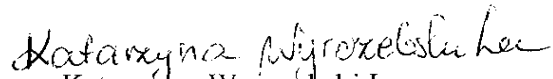
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Beginning December 12, 2003 the new phone number for the examiner of record will be 571-272-1127.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (703) 306-5875. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Katarzyna Wyrozebski Lee
Primary Examiner
Art Unit 1714

November 20, 2003